Tri-Party Agreement

Change Notice for Modifying Approved Documents/ Workplans In Accordance with the Tri-Party Agreement Action Plan, Section 9.0, *Documentation and Records*

0068093

Change Number	Document Submitted Under Tri-Party Agreement Milestone M-013-00L	Date:
TPA-CN-146		12/27/05

~~Document Number and Title:~~ ~~DOE/RL-2001-01, Plutonium/Organic-Rich Process~~ Condensate/Process Waste Group Operable Unit RI/FS Work Plan: Includes the 200-PW-1, 200-PW-3, and 200-PW-6 Operable Units	~~Date Document Last Issued:~~ 04/07/2004
~~Originator:~~ V. J. Rohay	~~Phone:~~ ~~373-3803~~

Description of Change: The work plan is being changed to (1) move risk assessment activities from the Remedial Investigation (RI) report to the Feasibility Study (FS); and (2) allow the remaining dispersed carbon tetrachloride vadose zone plume investigation results from the 218-W-4C Burial Ground to be reported in the FS rather than in the RI report.

The U.S. Department of Energy, Richland Operations Office (RL) (B. L. Foley/L. D. Romine) and the U.S. Environmental Protection Agency (EPA) (D. A. Faulk) agree that the proposed change modifies an approved work plan/document and will be processed in accordance with the Tri-Party Agreement Action Plan, Section 9.0, *Documentation and Records*, and not Chapter 12.0, *Changes to the Agreement.*

5.2.6 Remedial Investigation Report: In this section of the work plan, page 5-8, delete "and evaluating risks through a QRA." The affected page is attached.

5.2.6.1 Data Quality Assessment. In this section of the work plan, p. 5-8, add the following sentence: "The results and DQA for the dispersed carbon tetrachloride vadose zone plume Step II investigation at the 218-W-4C Burial Ground will be included in the FS." The affected page is attached.

5.2.6.3 Risk Assessment. In this section of the work plan, page 5-10, last sentence in the section, change "...in the RI and FS reports" to "...in the FS report." The affected page is attached.

5.2.6.3.1 Human Health Risk Assessment: In this section of the work plan, page 5-10, change "RI report" to "FS." The affected page is attached.

Justification and Impacts of Change:

A critical aspect of the remedial investigation of the 200-PW-1 OU representative site (216-Z-9 Trench) is being conducted as part of the "Alternatives for Carbon Tetrachloride Source Term Location" project ("DNAPL investigation") under separate contract to DOE-RL. The report on this part of the investigation will be issued as a separate report by the contractor conducting the investigation (anticipated in April 2006). In addition, key data will be collected as part of the 200-PW-1 remedial investigation during drilling of the slant well beneath the 216-Z-9 Trench (data to be available in June 2006). Although the data from both projects will be available for inclusion in the RI report (TPA Milestone M-015-45A, due October 31, 2006), the data will not be available in time to support completing the risk assessment in the RI report. The risk assessment will be incomplete without the DNAPL investigation and Z-9 slant well characterization results. Therefore, the project managers agree that the risk assessment will be included in the FS (TPA Milestone M-015-45B, due September 30, 2007) rather than the RI report. Moving the risk assessment from the RI report to the FS will have no impact on the outcome of the RI/FS process.

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~~Justification and Impacts of Change:~~ ~~(continued)~~

Initial investigation activities have been conducted at the 218-W-4C Burial Ground. However, additional investigation will ~~be conducted following retrieval of the retrievably stored waste (RSW) in trench T-04. In accordance with TPA milestone~~ M-91-40, retrieval of the RSW in trench T-04 will be completed by 12/31/06. Based on this schedule, data from this ~~investigation activity~~ cannot be completed in time for the results to be included in the RI report (TPA Milestone M-015-~~45A, due October 31, 2006). Moving the data quality assessment and data evaluation results from the RI report to the FS~~ will have no impact on the outcome of the RI/FS process.

Approvals:

FMR RL Unit Manager*	12/27/05 Date	X Approved	__ Disapproved	
Craig Cameron Lead Regulatory Unit Manager*	1/3/06 Date	X Approved	__ Disapproved	

*Send approved form to FH TPAI, A4-25, and the Administrative Record, H6-08

target detection limits for those analytes are provided in Table 2-1 in the DQO SAP (Appendix E).

Soil vapor samples collected during borehole drilling at the representative sites, during borehole drilling for the DNAPL investigation, and during the investigation of the dispersed carbon tetrachloride vadose zone plume will be analyzed for carbon tetrachloride and selected volatile degradation products based on the representative waste site, DNAPL, and dispersed carbon tetrachloride plume DQO processes and as defined in the associated SAPs (Appendices B, C, D, and E of this work plan). The list of analytes, methods, and associated target detection limits are provided in Table B-10 of the representative sites SAP (Appendix B), Table 2-1 in the dispersed carbon tetrachloride plume SAP for the Step I investigation (Appendix C), Table D-5 in the dispersed carbon tetrachloride plume SAP for the Step II investigation (Appendix D), and in Table 2-2 in the SAP for the DNAPL investigation (Appendix E).

Groundwater samples collected during the Step II investigation of the dispersed carbon tetrachloride vadose zone plume will be analyzed for carbon tetrachloride based on the dispersed carbon tetrachloride plume DQO process and as defined in the associated SAP (Appendix D of this work plan). The list of analytes, methods, and associated target detection limits is provided in Table D-6 in the dispersed carbon tetrachloride plume SAP for the Step II investigation (Appendix D).

5.2.6 Remedial Investigation Report

This section summarizes data evaluation and interpretation subtasks leading to the preparation of an RI Report. The primary activities include performing a data quality assessment (DQA); evaluating the nature, extent, and concentration of contaminants based on sampling results; assessing contaminant fate and transport; and refining the site conceptual contaminant distribution models.

Deleted: ; and evaluating risks through a QRA

5.2.6.1 Data Quality Assessment

A DQA will be performed on the analytical data to determine if the data are the right type, quality, and quantity to support the intended use. The DQA completes the data life cycle of planning, implementation, and assessment that began with the DQO process. For this task, the data will be examined to determine if they meet the analytical quality criteria outlined in the DQO and to determine if the data are adequate to evaluate the decision rules in the DQO. The results and DQA for the dispersed carbon tetrachloride vadose zone plume Step II investigation at the 218-W-4C Burial Ground will be included in the FS.

5.2.6.2 Data Evaluation and Conceptual Contaminant Distribution Model Refinement

This task will include evaluating the information collected during the investigation. The acquired chemical and radiological data will be compiled, tabulated, and evaluated to gain as much information as possible to satisfy the data needs. Data evaluation tasks may include the following:

3. DOE will follow the required regulatory processes for groundwater remediation (including public participation) to establish the points of compliance and remedial action objectives. It is anticipated that groundwater contamination under the core zone will preclude beneficial use for the foreseeable future, which is at least the period of waste management and institutional controls (150 yr). It is assumed that the tritium and iodine-129 plumes beyond the core zone boundary will exceed the drinking water standards [40 CFR 141, "National Primary Drinking Water Regulations"; 40 CFR 142, "National Primary Drinking Water Regulations Implementation"; 40 CFR 143, "National Secondary Drinking Water Standards"; and DOE Order 5400.5, *Radiation Protection of the Public and the Environment*] for the period of the next 150 to 300 yr (less for the tritium plume). It is expected that other groundwater contaminants will remain below, or be restored to, drinking water levels outside the core zone.

4. No drilling for water use or otherwise will be allowed in the core zone. An intruder scenario will be calculated for in assessing the risk to human health and environment.

5. Waste sites outside the core zone but within the Central Plateau (200 North Area, Gable Mountain Pond, B/C Crib Controlled Area) will be remediated and closed based on an evaluation of multiple land-use scenarios to optimize land use, institutional control cost, and long-term stewardship.

6. Other land-use scenarios (e.g., residential, recreational) may be used for comparison purposes to support decision making, especially for the following:
   - The post-institutional controls period (>150 yr)
   - Sites near the core zone perimeter to analyze opportunities to "shrink the site"
   - Early (precedent-setting) closure/remediation decisions.

7. This framework does not deal with the tank retrieval decision.

These items form the basis for the OU risk assessments to be conducted in the FS report.

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5.2.6.3.1 Human Health Risk Assessment

For the 200-PW-1, 200-PW-3, and 200-PW-6 OUs, a quantitative, baseline human health risk assessment for the representative sites will be prepared, as part of the FS report, to evaluate risk to human receptors from potential exposure to contaminants in accessible surface sediments and shallow subsurface soils. The risk assessment also will evaluate the potential for contaminants currently in the vadose zone beneath the waste sites to impact groundwater in the future. The risk assessment also will evaluate the potential risks associated with the dispersed carbon tetrachloride vadose zone plume and the distribution of DNAPL carbon tetrachloride. Risks from current groundwater contamination will not be evaluated; this evaluation will be conducted as part of the RI/FS process for the groundwater OUs.

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In the FS report, the risk assessment of the waste sites will focus on the representative sites, because data collected through the RI at these sites are sufficient to allow quantification of risk. The risk assessment will follow the risk guidelines identified through the Risk Framework workshops as documented in the Tri-Parties response to the HAB advice (Klein et al. 2002).

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